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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,601

04/02/2004

Douglas J. Adelman

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EXAMINER

FRANK, NOAH S

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

06/02/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,601	<b>Applicant(s)</b> ADELMAN ET AL.	
	<b>Examiner</b> NOAH FRANK	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 4, 13, 23, 24, 27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14, 16-22, 25, 26 and 29-32 is/are rejected.
- 7) ☒ Claim(s) 15, 19, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/14/04; 12/10/04</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 1-3, 5-12, 14-22, 25-26, 29-32 were elected in the reply filed on 2/8/08.

Claims 4, 13, 23-24, 27-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/8/08.

### ***Claim Objections***

Claim 15 objected to because of the following informalities: Claim 15 depends on withdrawn claim 4. Appropriate correction is required.

Claim 19 objected to because of the following informalities: Claim 19 depends on withdrawn claim 4. Appropriate correction is required.

Claim 25 objected to because of the following informalities: Claim 25 refers to withdrawn claim 23. Appropriate correction is required.

Claim 26 objected to because of the following informalities: Claim 26 refers to withdrawn claim 24. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 states, "wherein the functional group that can react with the hydroxyl groups of the secondary amines is isocyanate". However, in claims 1 and 2, which claim 9 depends on, there are first and second functional groups. For the purposes of examination functional group is understood to be –second functional group–.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-12, 14, 16-22, 25-26, 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barsotti et al. (WO 02/057339) in view of Goel et al. (EP 0 180 783).

Considering Claims 1-3, 25-26, 32: Barsotti et al. teaches the claimed composition and process, except using spiroorthocarbonates instead of amide acetals (2:35-4:30).

Barsotti does not teach using amide acetals. However, Goel et al. teaches the polymerization of amide acetals with polyisocyanates in the presence of moisture (1:1-15). The amide acetals undergo hydrolysis to release hydroxyl groups (1:15-20). The

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preferred amide acetals are those corresponding to formula I (2:1-10) wherein R is an alkyl group having from 1 to 18 carbon atoms, R' is independently hydrogen or a hydrocarbon group having from 1 to 18 carbon atoms, and R'' represents hydrogen or a hydrocarbon group having from 1 to 18 carbon atoms (2:5-20). The amide acetal wherein the upper two R' are H, R' and R'' are methyl (C=1), and R is undecyl (C=11) corresponds to 1-aza-(3,7-dimethyl-5-undecyl)-4,6-dioxabicyclo(3.3.0)octane. Barsotti and Goel are combinable because they are concerned with the same technical difficulty, namely blocked hydroxyl groups for polyurethanes. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used amide acetals, as taught by Goel, in the invention of Barsotti, as an equivalent alternative hydrolyzable blocked hydroxyl group.

Considering Claims 5-6: Barsotti teaches reacting the composition with water to form a crosslinked material (claims 5-6).

Considering Claims 7-8: Barsotti teaches the composition being a coating composition (claims 7-8).

Considering Claim 9: Barsotti teaches the functional group being isocyanate (claim 9).

Considering Claims 10-11: Barsotti teaches the compositions containing additives such as pigments, stabilizers, rheology control agents, flow agents, toughening agents and fillers (14:5-15).

Considering Claim 12: Barsotti teaches the compositions containing a binder of an acrylic polymer (13:1-5).

Considering Claim 14: Barsotti teaches the product of the process which is crosslinked (claim 15).

Considering Claim 16: Barsotti teaches the product which is a coating (claim 17).

Considering Claim 17: Barsotti teaches the polymers having molecular weights below 3000 (5:20-30).

Considering Claim 18: Barsotti teaches the second polymer having isocyanate functionality (claim 9).

Considering Claims 19-22: Barsotti teaches the crosslinker being melamine (12:5-10).

Considering Claims 29-30: Barsotti teaches functionalizing the spiroorthocarbonate with methacryloxy functionality (8:20-25). Such a functionalized compound would have multiple functionalities.

Considering Claim 31: Barsotti teaches using the compositions for base coats and clear coats (11:1).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 7, 9-11, 17-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, 9-12, 20 of copending Application No. 10/466,126 in view of Goel et al. (EP 0 180 783).

This is a provisional obviousness-type double patenting rejection.

Barsotti et al. ('126) teaches the claimed composition and process, except using spiroorthocarbonates instead of amide acetals (2:35-4:30).

Barsotti does not teach using amide acetals. However, Goel et al. teaches the polymerization of amide acetals with polyisocyanates in the presence of moisture (1:1-15). The amide acetals undergo hydrolysis to release hydroxyl groups (1:15-20). Barsotti and Goel are combinable because they are concerned with the same technical difficulty, namely blocked hydroxyl groups for polyurethanes. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used amide acetals, as taught by Goel, in the invention of Barsotti, as an equivalent alternative hydrolyzable blocked hydroxyl group.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOAH FRANK whose telephone number is (571)270-3667. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO/  
Supervisory Patent Examiner, Art Unit 1796  
27-May-08

NF  
5-21-08